REMARKS

This Amendment is in response to the Office Action mailed 09/12/2005. Claims 1-2, 4-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/242151 (Attorney Docket No. RPS9-2001-0103US2). In response a terminal disclaimer limiting the term of any patent issuing on the present Application to coexist with the term granted any patent issuing on Application Serial No. 10/242151 is filed herewith. In addition, conditions under which the term of any patent issuing on the present application would not coexist with a patent issuing on Application Serial No. 10/242151 is set forth in the terminal disclaimer.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph because according to the Examiner there are insufficient antecedent basics for "said searching information." Even though applicants believe the Examiner erred because "searching" (line 3) is sufficient antecedent for "said searching," in an attempt to promote the prosecution of this Application the claim is amended as shown above[1]. It is believed that this amendment removes any issue of insufficient antecedent that may have been in the claim.

Claims 1-7, 9-11 and 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Chao et al. (U.S. Patent No. 6,370,144 B1).

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[1]From a grammatical perspective, "said searching" qualifies "information". Therefore, the clause should have been "for each segment generating from said searching, information......" The comma decouples "said searching" from "information".

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Before addressing the rejection applicants give a brief summary of the Law as applied to rejection under 35 U.S.C. 102(e) anticipation. For a claim to be rejected as being anticipated by a reference every element, feature and operation of the claim must be shown in a single reference.

It is applicants' contention that every element, feature and operation of applicants' claimed invention are not shown in Chao et al. Therefore, for reasons set forth herein the claims are not anticipated by the Chao reference. In general the claims call for searching to begin at any location within a search segment. In particular, claim 1 and dependent claims call for "beginning at any location within at least one of the n segments." Claim 9 and 10 calls for "wherein said first location is not a fixed but can be any location within a segment that is being searched." Finally, claim 18 and dependent claim 19 call for "beginning at any location within said n segment." It is applicants' contention that this feature of the claims is not found in Chao et at. In Chao et al searching always begin at the lowest location refer to as lowest time stamp in the zone until the first bit label 1 is found, see for example Fig. 14, col. 16 lines 58 through col. 17 lines 11 and col. 21 lines 29-50. This concept of the reference searching from the lowest time stamp until the first location label 1 is found set forth in several other parts of the specification. See for example page 17, line 35 and (summary of invention) stating, in part, "The present invention using a searching technic to find the first memory location of a calendar queue with a validity bit of "1" (lowest time stamp), page 21 lines 40; "the present invention uses a hierarchical searching technique to find the first

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memory location of a calendar queue with a valley bit of "1" (that is, the lowest time

stamp) and page 40, line 31 "the method of claim 8 wherein each of the memory banks

includes the first zone defined by time stamps less than M and second zone defined by

time stamps greater than or equal to M." It is clear from this teaching that in the

reference searching begins at the lowest location refer to in the patent as lowest time

stamp position whereas in the amended claims searching begins at any location

wherein a search zone. Because the reference does not teach the feature of being

able to begin the search at any location within the segment. It does not anticipate the

claims.

In addition, applicants' argue claim 7 is patentable distinct. The claim calls for

executing the searches simultaneously within the segments. This feature of applicants'

invention is not suggested in the Chao et al. reference. In Chao et al. the searching is

done sequentially in the zone with a zone bit indicating which zone is being searched.

The searching cannot be done simultaneously since the zone bit in one zone is

dependent upon the settings of the zone bit in the previous zone. See for example

Figure 21, 22A and 22B also col. 25, section 4.2.2 and Col. 33 section 4.3.3 lines 10-

31.

In addition, claim 19 is separately patentable. The claim set forth a specific

algorithm for determining a final winning location. No such teaching is found in the

reference. Applicants are aware of the Examiner's position on page 12 of the Office

Action where the Examiner points to Figure 18 and 25, col. 30 line 8-12 as teaching this

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feature of applicants' invention. Applicants respectfully disagree with the Examiner and argue that the teaching referred to by the Examiner is used in the reference to determine the minium time stamp from which searching begins. It does not identify a winning location set forth in claim 19. In fact, the algorithm in applicants' claim is different from the one set forth in the Figures and portion of the specification identified by the Examiner. As a consequence, claim 19 is separately patentable, in its own rights, over the art of record.

Claims 11-17 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Chao et al. (U.S. Patent No. 6,370,144 B1).

With respect to claim 11, 15 and claims depending on them applicants argue that these claims are patentable over the art of record in that the Examiner has failed to make out a prima facie case of obviousness. In particular, the Examiner admits that certain elements of applicants' claim is not taught in Chao et al (See page 13, second paragraph of office action). However, the Examiner merely states that it's well know in the art that multiple search engines can be used to provide faster search capabilities. The Examiner has not provided a single shred of evidence to support this position. Applicants have no knowledge of multiple search engine operating to generate segment information as set forth in these claims. As a consequence, the Examiner has not provided sufficient information to suggest that what he is claiming as well known in the prior art is in fact so known. Applicants suggest that if the Examiner has such knowledge at least he should provide an affidavit specifically stating what is common in

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the prior art which he is combining with the reference to make the claim obvious. Since the Examiner has not provided such an affidavit or other information to date then the Examiner's combination base upon Chao et al and what he deems as common knowledge is improper and insufficient to support a rejection under 35 U.S.C. 103. Therefore, these claims are not obvious in view of the reference.

In addition, applicants argue the reference Chao et al teaches away from applicants' claims. Such teaching away is deemed evidence of unobviousness. In particular, the claims call for searching to begin from any location within a sector. In contrast, as argued above and incorporated herein by reference, Chao et al. calls for searching to begin at a fixed location (i.e., lowest location-lowest time stamp- in the zone). Because the reference teaches away from the claim invention, the claims are not made obvious in view of the references.
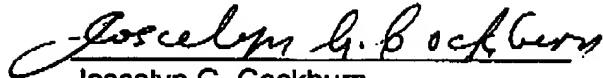
With respect to claim 8, the Examiner states the claim would be allowed if we written in independent form with all the limitation of intermediate claims included. In response claim 8 is written in independent form and is now in a condition for allowance which is respectfully solicited.

Newly added claims 22-25 are patentable over the art of record in that they recite, in part, the assumptions feature similar to Claim 8 deemed allowable.

It is believed the present amendment answers all issues raised by the present amendment. Reconsideration is hereby requested and early allowance of all claims is solicited.

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PATENT
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Respectfully Submitted,

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